

CLAIMS

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1. Process for coding compressed video data streams relating to television programs for the transmission of streams adapted to the switching of programs, wherein data relating to pictures of the various programs are detected from the various compressed video data streams so as to be copied, processed, re-encoded and then inserted into each of these streams, as appended data, to obtain the adapted streams.
  2. Process according to Claim 1, wherein the appended data are copied on the basis of a detection of the pictures of intra type in the compressed video data streams.
  3. Process according to Claim 1, wherein the appended data are copied on the basis of a detection of the pictures of inter type in the compressed video data streams.
  4. Process according to Claim 1, wherein the processing consists in reducing the resolution of the images extracted.
  5. Process according to Claim 1, wherein the appended data also comprise complementary data.
  6. Process according to Claim 5, wherein the complementary data relate to a number or name of a program or the start and end time of a program in progress or of a coming program or the logo of the station broadcasting a program.
  7. Process according to Claim 1, wherein the appended information is used for the creation of a mosaic or of an interactive electronic program guide.
  8. Process according to Claim 1, wherein the data stream is an MPEG 2 coded stream, the data packets relating to the appended data being transmitted instead of a program.
  9. Process according to Claim 1, wherein the data stream is an MPEG 4 coded stream, the appended data are

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data required for scene reconstruction and these data are inserted into this stream in accordance with the standard.

10. Use of the process according to Claim 5 for the automatic switching of programs, the complementary data comprising an instant of switching of a program.

11. Use of the process according to Claim 1 for the creation of an imagette in the image (PIP mode) on the basis of the appended data.

10 12. Process for switching television programs, the information relating to these programs being received in the form of several compressed video data streams coded according to the process of Claim 1, some data relating to images of inter type and of intra type, the  
15 data of a selected program originating from the decoding of the current data of the stream which relate to this program, wherein said process detects and then stores the appended data of intra type of programs other than the selected program, selects and decodes,  
20 upon a command for switching over to a new program, the stored appended data relating to this new program, and then temporarily transmits, while awaiting the decoding and transmission of the current data of the new program, the decoded appended data.

25 13. Device for switching a television program receiving the information relating to programs in the form of several compressed video data streams coded according to the process of Claim 1, some data relating to images of inter type and of intra type, the device  
30 comprising a circuit for decoding, on the basis of the data streams received, the current data of the stream which relate to the program displayed, wherein said device also comprises:

- a circuit for detecting the appended data  
35 relating to images of intra type of programs other than the program displayed
- a circuit for storing these data

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- a circuit for selecting the stored data, the selecting being carried out on the basis of a remote control decoding circuit giving the information of the new program to be displayed
- 5    - a circuit for decoding the selected data
- a switching circuit receiving the output from the decoder of current data and the output from the decoder of selected data so as to temporarily switch, to the output of the
- 10    device, the selected data.
- 14.    Device for coding digital television signals for the implementation of the process according to Claim 1, wherein said device comprises a circuit for detecting and copying data relating to images of
- 15    various available programs, a circuit for decoding and then for re-encoding the copied data and a circuit for inserting the re-encoded data into the streams.

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